0.0 GENERAL

The 62 foot motor yacht "SEVERN" was surveyed while blocked ashore inside at the U.S. Naval Station Small Craft Repair Facility on Tuesday August 12, 2014 for the purpose of determining the value of the vessel. It should be noted that this is not a complete condition and valuation survey but rather a valuation inspection only.

The yacht was built to good standards and workmanship by Pacemaker Yachts. She has a fiberglass hull with wooden main deck and cabin, twin diesel engines, shafts and rudders. However, the vessel's overall condition was found to be only fair; requiring repairs to her main deck, cabin sides, flying bridge, interior bulkheads, electrical systems, fuel systems, propeller shaft bearings, updating of her safety equipment as well as additional minor repairs to put her in yacht condition.

Principle data of the vessel:

LOA:	62'	0"
Beam:	17'	2"
Draft:	4'	0"
Displacement:	48,0	000#

Builder: Pacemaker Yachts, New Jersey

Year Built: 1974

Hull Identification Number: PAC621011273 (ship's papers)

Documentation Number: None seen

The survey of this vessel is based solely on a careful visual inspection of all accessible portions of its structure and available equipment.

Certain portions of the hull and structure can be observed only by removal of flats, soles, hull lining, headliners, decking, joiner work and tanks. This would be destructive in nature, prohibitively time consuming and expensive to replace, hence was not done.

Complete inspection of machinery, auxiliaries, piping, tanks, systems, electrical wiring, electrical and electronic equipment can be accomplished only by continuous operation or disassembly. This has not been done.

1.0 HULL & STRUCTURE

HULL MATERIAL: Semi rigid laminating polyester resin, woven roving and fiberglass mat.

CONSTRUCTION: Laminated in a female mold with fiberglass reinforced floors, stringers and bulkheads.

INSPECTION OF HULL: The hull was visually inspected and sounded in select areas. The hull is well constructed and the keel, stem, longitudinales, transom and other structural members show no evidence of delamination, deterioration or structural failure. The spray rail is laminated fir and is separating at it seams and joints. The fasteners for the spray rail's stainless steel strip are leaking.

CONDITION OF FINISH: Good condition above and below the waterline. The hull is fair, smooth and free of apparent collision. There are several areas scratches and slight chafing damage to the hull.

FRAMES & LONGITUDINALES: Well glassed to the hull.

HULL TO DECK JOINT: The plywood deck is set down on top of the sheer clamp and secured with additional layers of fiberglass, in good condition but with some evidence of leaking particularly along the starboard side.

BULKHEADS: Plywood, fiberglased to the hull. The centerline bulkhead at the installed fire extinguishing system's C02 cylinder is damaged and deteriorated. The bulkheads in the galley, saloon starboard side and port side aft stateroom are wet and deteriorated at their outboard edges.

KEEL &KEEL BOLTS: Fiberglass box keel in good condition.

FASTENINGS: Stainless steel and aluminum. Good condition.

RUDDERS & RUDDER POSTS: Stainless steel rudder posts and bronze rudder post. The rudder posts show past evidence of leaking.

GALVANIC PROTECTION: Shaft and rudder zinc anodes are partially wasted.

SWIM PLATFORM: Teak in fair condition has been poorly painted.

REMARKS: Vessel was fitted with Bennett Trim tabs; however the trim tabs have been removed from the stern.

2.0 DECK, DECKHOUSE, ETC.

CONSTRUCTION: The main deck is fabricated from plywood secured to a wood sheer clamp over which is laid a thin layer of teak planking. The cabin sides, top and flying bridge are fabricated from plywood. The section of cabin forward of the wheel house is molded fiberglass.

INSPECTION OF THE DECK: The main deck was visually inspected and sounded in suspect areas. The teak planking is well secured forward but loose from outboard of the hatch and aft along the port and starboard sides. The starboard side of the main deck appears to be particularly soft and the plywood deck beneath the teak planking is most likely wet and/or deteriorated. The teak planking seams are also beginning to open in several areas.

INSPECTION OF THE DECKHOUSE: The deckhouse was visually inspected and sounded in select areas. Several areas of soft and deteriorated wood were found below the windows at the pilot house, dining saloon windows and the aft saloon windows, on both the port and starboard sides and at the shore power inlet receptacles.

INSPECTION OF THE FLYING BRIDGE: The flying bridge was visually inspected and sounded in select areas. The deck is wet along the port and starboard sides.

INSPECTION OF THE AFT DECK: The aft deck was visually inspected. The aft plywood bulwark is wet, deteriorated and delaminated.

CONDITION OF FINISH: Fair many poorly painted areas and many areas where the paint is peeling or checked and cracked. The bright work on the flying bridge is in poor condition.

HATCHES: Wood framed hatch forward with no evidence of leaking. The aft stateroom escape hatch is obstructed by the aft deck carpeting.

LIFELINES & FITTINGS: Teak cap rail with stainless steel stanchions, appears to be well secured.

ANCHOR WINDLASS: The upper sections of the Ideal electric windlass have been removed.

DECK DRAINS: Drains overboard below the waterline, all hoses should be replaced and double clamped.

CLEATS & CHOCKS: Stainless steel or chrome plated bronze, well secured.

3.0 PAINTS & COATINGS

HULL & STRUCTURE: Above the waterline the hull has been painted with what appears to be acrylic type paint, in good condition but with a few scratches and scrapes. Below the waterline the anti-fouling paint was old and worn with several seasons of buildup. There was no evidence of gelcoat or fiberglass blistering.

DECK, DECKHOUSE & AFT DECK: Fair, with blistered and peeling paint at the wind screen, cabin windows and exterior overhead. As mentioned above the bright work on the flying bridge is in poor condition.

INTERIOR: Fair condition with water stained areas and areas where the paint has been heavily applied or improperly taped so that the hardware has also been painted.

SPARS: None.

4.0 INTERIOR

ARRANGEMENT: Aft cabin motor yacht with a master stateroom, two guest staterooms and two enclosed heads in the stern sections. The forward sections of the vessel have a chain locker followed by a small crew's head and sleeping quarters with upper and lower berths. The galley is next aft, followed by the dining saloon. The engine room is below the dining saloon. The aft sections are down from the dining saloon and the inside steering station and aft saloon are up.

JOINER WORK: Fair condition. The forward door is missing in the crew's head with deteriorated wood in the cabinetry. The wood work at the windows is also damaged and water stained. The wood trim and plywood bulkheads in the dining saloon starboard side and master stateroom port aft are wet and deteriorated.

WINDOWS: The dining saloon and aft saloon windows are leaking. This has let water run down into the wooden cabin sides and into the vessel. As mentioned above the wood trim and plywood bulkheads in the dining saloon starboard side and master stateroom port aft are wet and deteriorated. The galley's port forward window is cracked.

INTERIOR VENTILATION: Fair with windows and opening ports.

BILGES: Dirty with some bilge water.

LOCKERS: Most are clean but the forward lockers are filled with miscellaneous gear.

CABIN SOLE: 1/2" plywood sole with carpeting in dining and living areas. The galley has a teak parquet floor with some damage and the crew's quarters sole is covered with linoleum. The plywood cabin sole in the master stateroom is slightly damaged from leaking rudder posts.

TYPE OF STOVE: Kenmore four burner 220VAC galley stove, not tested. No operating instructions posted. The vessel also has a Kenmore and Panasonic microwave ovens.

STOVE SHUT-OFFS: Circuit breaker at panel, operational.

REFRIGERATION: EWave 120 volt, operational. The vessel is also fitted with an ice maker, not tested.

AIR CONDITIONING: Nine Cruisair water cooled compressor units with a common 115 volt Dayton circulating pump and saltwater strainer, poorly piped. The plywood foundation for the circulating pump and compressors has broken away from its fiberglass tabbing.

5.0 SPARS & RIGGING

RIG TYPE:

MAST & BOOM:

STANDING RIGGING:

TURNBUCKLES:

CHAINPLATES:

REMARKS: This section is not applicable.

6.0 PROPULSION & CONTROLS

MAIN ENGINE TYPE: Twin 8V71TI Detroit Diesels. Not tested. Reportedly the engines have overhauled by the Small Craft Repair Facility with new liners, pistons, rings, seals and bearings.

Port Engine		Starboa	Starboard Engine		
Model #: Serial #:	70823300 8VA223821	Model #: Serial#	70827300 8VA220450		
Hours:	3400.0	Hours:	2753.9		

LOCATION: Under main saloon.

TRANSMISSION: Twin Disc gears with a 2:1 gear ratio.

CONTROLS: Not tested.

ENGINE BEDS: Reinforced fiberglass, good condition.

ENGINE MOUNTS: Bolted to engine beds, well secured.

ENGINE COOLING: Freshwater cooled, the saltwater intakes are large gate, double clamped and in good condition.

WATER HOSES: Good condition.

BELTS: Alternator belts appear to be slightly worn.

DRIP/OIL PAN: Sheet metal pans between the engine beds.

EXHAUST SYSTEMS: Cast iron water injection elbows, copper pipe, stainless steel pipe and fiberglass pipe with mufflers and flexible hose, all in good condition. The generator exhaust has a water injection elbow at the exhaust manifold and flexible hose and plastic water lift muffler, all connections are double hose clamped.

OIL DISCHARGE PLACARD: Posted.

VENTILATION OF ENGINE ROOM: Good, forced draft blowers and natural vents.

FUEL TANKS: Single aluminum tank under the master stateroom berth. No shut off valves at the tank and the fuel line connections have bronze elbows threaded into the aluminum tank. The fuel tank is properly grounded. There is also an unused fuel tank under the aft quest stateroom forward berth and the forward guest stateroom aft berth.

FUEL LINES: AeroQuip USCG Approved flexible hose, except for the main supply lines from the manifold under the steps to the main engine and generator prime mover; these sections are AeroQuip (J1402) hose intended for use as brake lines, not USCG Approved and should be replaced. The AeroQuip lines in the engine room are original equipment, over twenty five years old and should be replaced. The fuel lines from the aft fuel tank to the manifold are newer hose and in good condition but poorly supported.

FUEL FILTERS: Racor filters on the main engine with a smaller Racor filter at the generator.

FUEL SHUTOFFS: At the fuel manifolds under the passageway steps.

PROPELLERS: Two four bladed 28 x 29 bronze propellers, in good condition.

STUFFING BOXES: Bronze single hose clamped, in fair condition, both the stuffing boxes appear to be leaking and should have their flexible hose and clamps replaced and double clamped.

PROPELLER SHAFTS: Stainless steel 2 1/4 inch, in fair condition. The port and starboard muff are rusty.

SHAFT COUPLING: Steel, good condition.

STRUTS: Bronze struts, well secured.

SHAFT BEARINGS: The intermediate and V strut bearings are worn and will have to be replaced.

STEERING SYSTEM: Hynautic hydraulic steering system, in generally good condition.

7.0 PIPING, WATER SYSTEMS & TANKS

WATER TANKS & LOCATION: Plastic eight-two gallon tank under the forward guest stateroom berth.

FRESHWATER SYSTEM: 220 volt pump with an accumulator tank, not tested.

WATER HEATER: Force 10 twenty gallon stainless steel water heater, in good condition.

SALTWATER SYSTEM: Bronze seacocks, gate valves and thru-hulls, the forward head, guest state room head and master stateroom intake seacocks are bronze but single clamped and stiff. There is also a capped off thru-hull starboard in the engine room.

HEADS: Two 12 volt electric heads with holding tank discharge and one manual (Wilcox & Crittenden) head forward. Not tested.

HOLDING TANK: Three plastic holding tanks, one for each head with deck pump outs.

ELECTRIC BILGE PUMPS: Three 12 volt pumps, not tested.

MANUAL BILGE PUMP: None.

HEAD THRU-HULL FITTINGS: Bronze intake fittings, single hose clamped.

GALLEY THRU-HULL FITTINGS: Galley sink drain, bronze gate valve, single clamped to a copper pipe sea chest and in good condition.

REMARKS: Several piping or hose runs are pieced together with different hoses, pipe and clamps. An effort should be made to clean up all freshwater and saltwater piping and hose runs.

8.0 ELECTRICAL, ELECTRONICS & NAVIGATION

VESSEL'S SYSTEM; VOLTAGE: 12 Volt DC and 125/250 Volt AC shore power and ship's service generator.

AUXILIARY GENERATOR: 40KW generator driven by a six cylinder Perkins 4-135 diesel engine. Not tested.

ALTERNATORS: Twelve volt 60amp at each main engine.

BATTERY INSTALLATION: Starboard batteries have been removed. All main battery cables are over 25 five years old, not original equipment, are neoprene covered industrial cable not intended for marine service and should be replaced.

ELECTRICAL PANEL: 220/110 volt AC and 12 volt DC panels in the main saloon. No reverse polarity light at the AC panel

WIRING: Much of the wiring is poorly supported with loose junction boxes and improper splices, particularly under the wheel house instrument panel and in the machinery spaces.

INTERIOR LIGHTS: Operational.

NAVIGATION LIGHTS: Not tested.

SHORE POWER SYSTEM: Two 125 Volt/30amp and two 250 Volt/50amp circuits. However, the port and starboard shore power inlet receptacles do not appear to have circuit protection within ten feet of the electrical panel.

BATTERY CHARGER: Two Xantrex 60 amp12VDC chargers, operational.

RADAR: Raytheon RX 20, not tested

RADIO: An Icom IC-M127 in the pilot house and an Icom IC-504 on the flying bridge, not tested.

DEPTH FINDER: DataMarine Corinthian

KNOT/LOG: DataMarine Corinthian

GPS: Garmin 152 in the pilot house and Northstar 951X on the flying bridge, not tested.

9.0 SAFETY & MISCELLANEOUS EQUIPMENT

PORTABLE EXTINGUISHERS: Several hand portable Type B:C Size I extinguishers with gauges but not mounted. All extinguishers require an annual inspection and/or service.

INSTALLED SYSTEM: Three units: a Yachtsman 110C (forward) and a Halon 1301 (aft) installed in the engine room and a large CO2 system, both engine room systems require inspection and/or servicing.

DISTRESS FLARES: None seen.

COMPASS: Ritchie compass at the inside steering station and a Ritchie compass on the flying bridge, in good condition.

HORN/WHISTLE: Not tested.

BELL: On board.

LIFEJACKETS: None seen.

THROWABLE PFD: Two USCG Approved Type IV throwable.

ANCHORS/GROUND TACKLE: Large Danforth type anchor stowed forward with chain and nylon rode.

EMERGENCY TILLER: None seen.

MARPOL: 1990 USCG regulations require the posting of a placard in the galley area or dumping station warning against the dumping of plastic and garbage. This placard was not posted.

CONCLUSION

The motor yacht "SEVERN" is a well-constructed classic motor yacht, using good materials and workmanship. However, the yacht requires repairs to her main deck, cabin sides, flying bridge, interior bulkheads, electrical systems, fuel systems, propeller shaft bearings as well as updating of her safety equipment and a commissioning to put her in yacht condition.

To accomplish the above repairs will be both time consuming and expensive and may not be cost effective.

The 106th edition of the BUC Research used boat price guide gives a high value of \$119,500 and a low value of \$109,000 for this model vessel. Accessing the vessel's condition and the work required to put her in yacht condition and consulting with various parties, the current estimated market value for this vessel in the Chesapeake Bay area is \$54,500.

This report is made without prejudice, in good faith and is a description of the condition of the subject vessel as found at the time of the survey. The facts discovered and presented in this survey are in no way to be deemed a guarantee and/or warranty either specified or implied, for the subject vessel. It is further understood that the undersigned marine surveyor will not be held responsible for errors in judgment, inaccuracy, negligence, omission, misstatement, unforeseen or undetected defects or damages that may exist.

JOHN C. HOWEL

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Respectfully submitted, HOWELL MARINE, INC.

John C. Howell NAMS CMS President Howell Marine, Inc.

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Date

REFERENCES

Department of Transportation United States Coast Guard 2100 Second Street, SW Washington, DC 20593

National Fire Protection Association NFPA 302 Batterymarch Park Quincy, MA 02269

American Boat and Yacht Council, Inc. 613 Third Street Annapolis, MD 21403

American Bureau of Shipping ABS Plaza 16855 Northchase Drive Houston, TX 77060

Other books, references and sources such as Lloyd's Register of Shipping and Naval Ship's Technical Manuals are used in combination with the above in providing guidance for this survey report.